Figure 1: A Multiple Access System
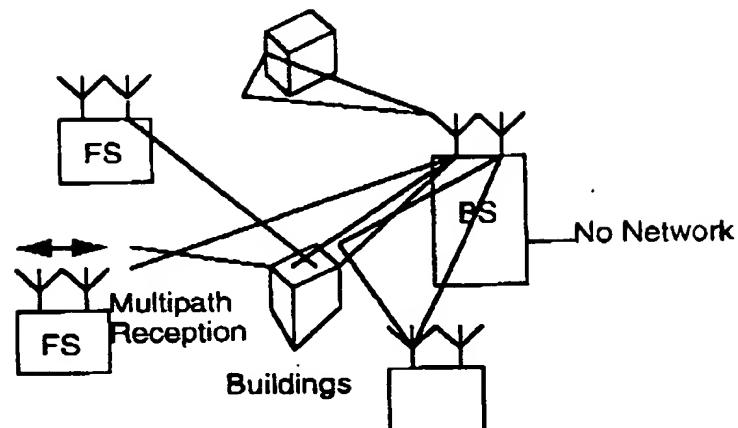
FS = Fixed Station
BS = Base Station

Antenna array

22, 24

LNA amplifiers

delay τ_{28}

control 33

32

20

30

signal quality power metric

Rake Rx

Demodulator Decoder

26

standard receiver

data
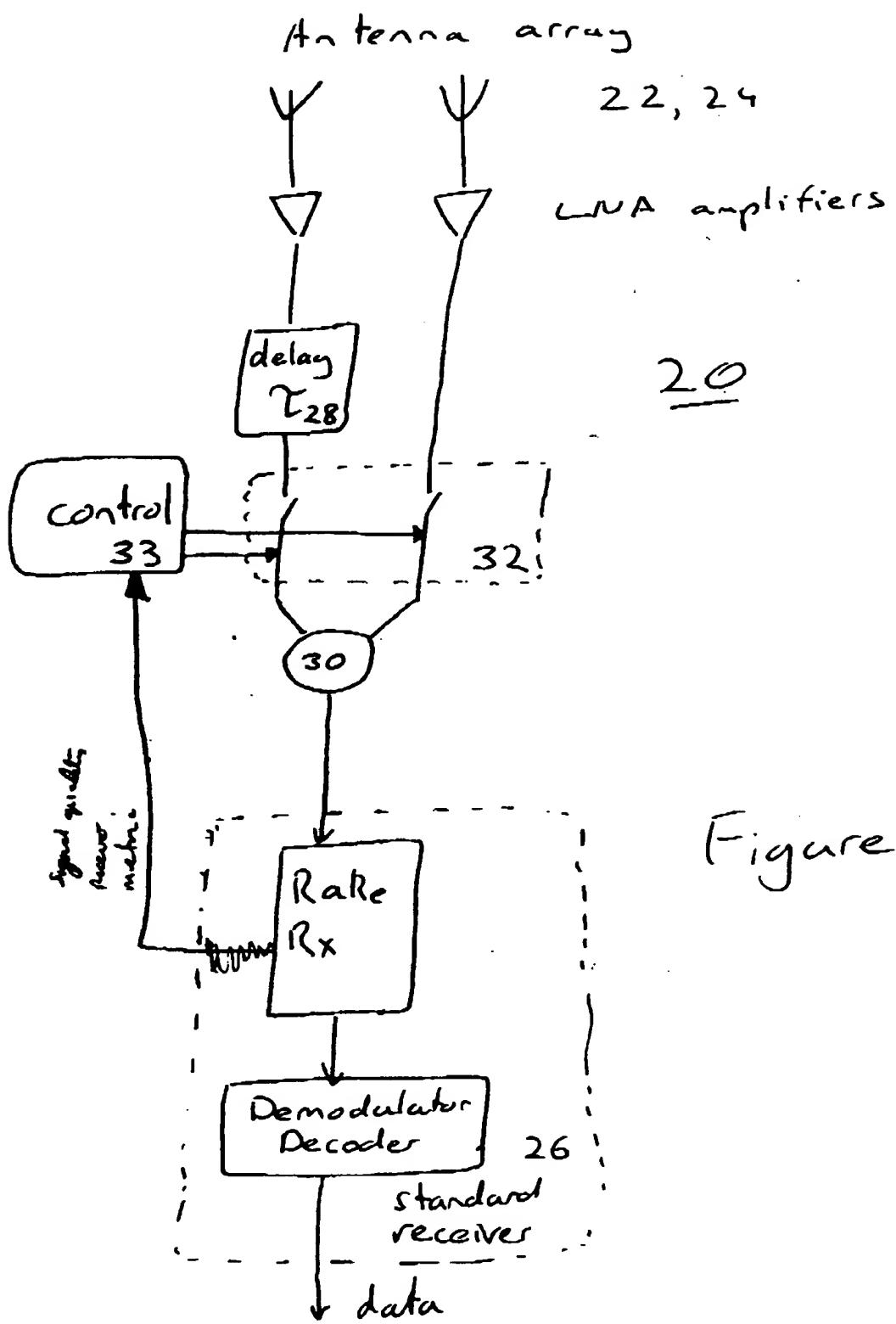
Figure 2

Switch B

		0	1
Switch A	0		B > A B > T
	1	A > B A > T	A > T B > T

Figure 2a

Figure 2 b

Initial signal
combination
(select new /employ
last deployed combination)

↓

Test new
signal
combination
according to timer

Select new
combination
for next
frame

maintain
previous
combination
for next frame

improvement
in signal quality
relative to last
recorded
signal
quality

Yes

No
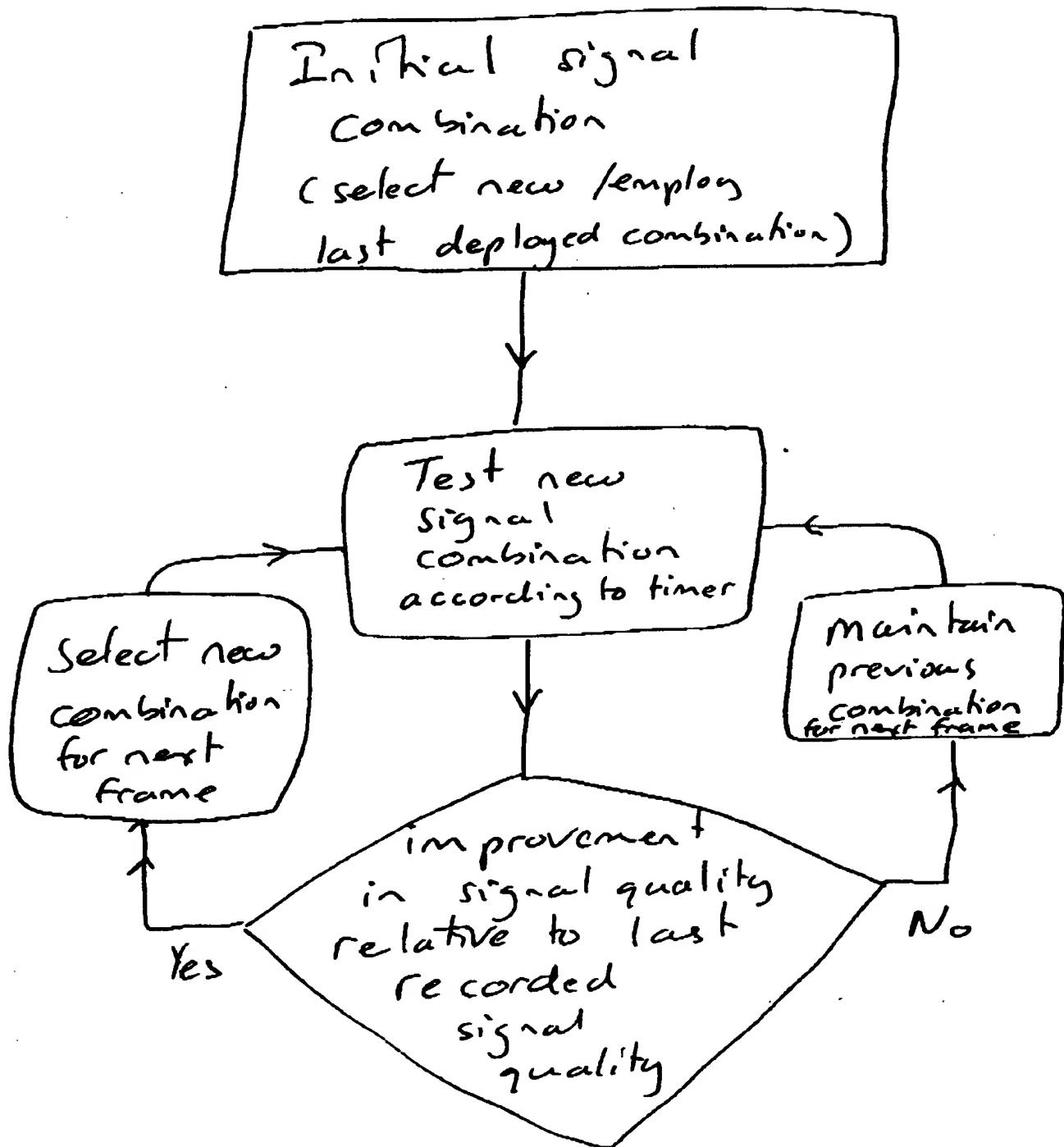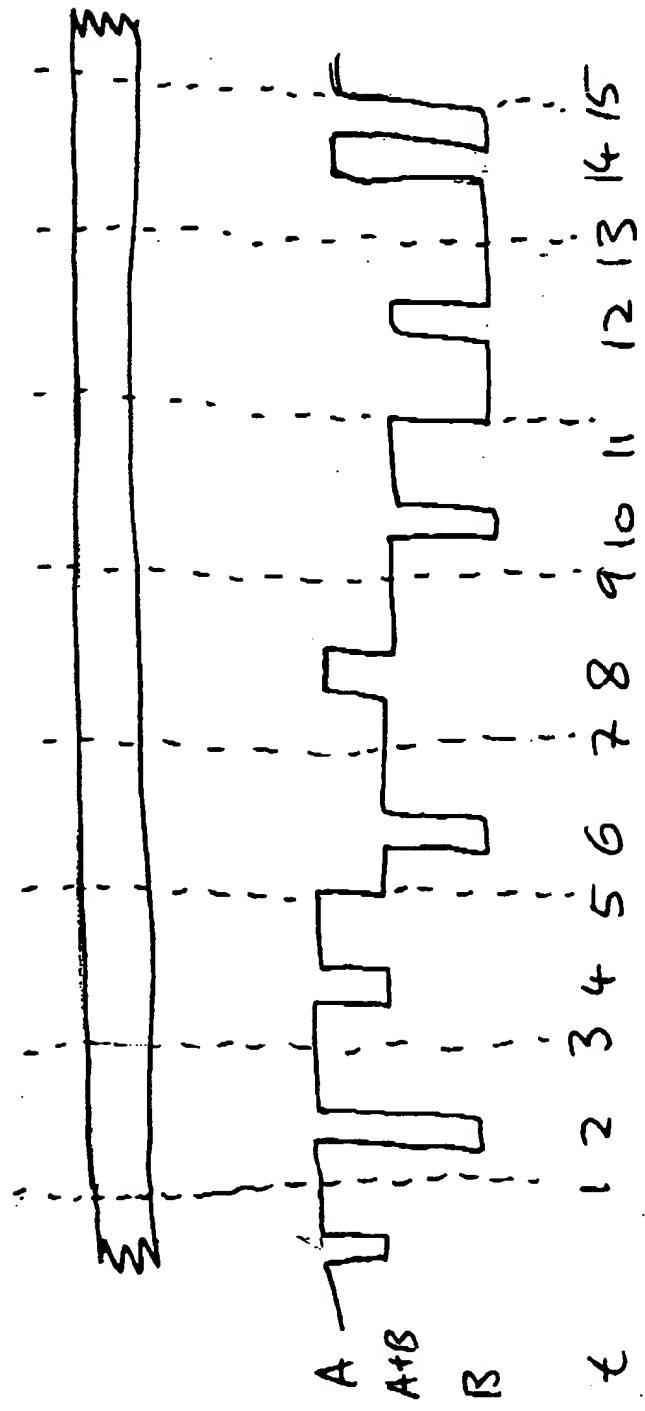
Figure 2c

Example 2: A1 begins with largest signal; A2 then starts to contribute but then fades

T = 0   A1 A2

T = 1   A1   A2

A
Threshold
B
Threshold

T = 2 A1   A2

T = 3   A1   A2
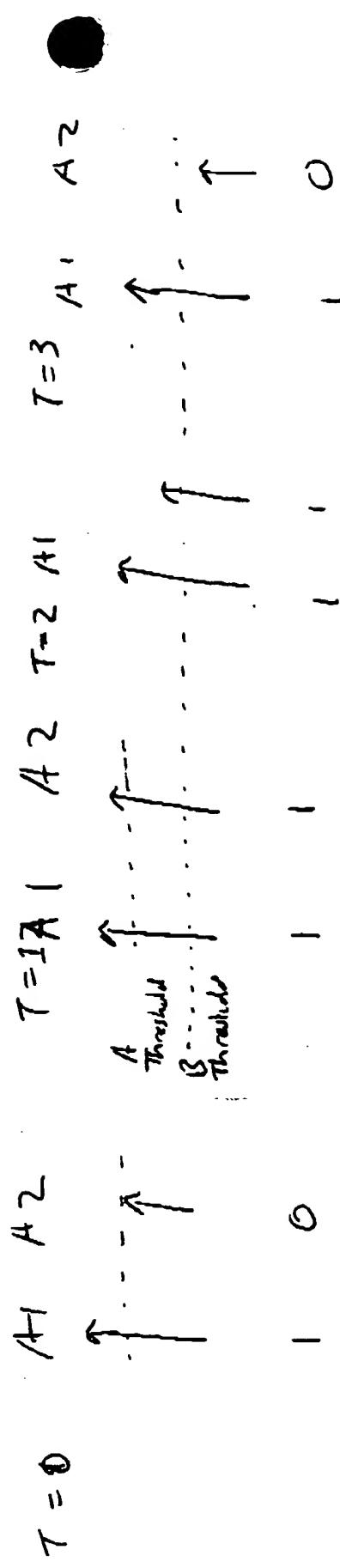
Figure 3

Example 1: A1 begins with largest signal; then A2 becomes dominant

Antenna

	A1	A2
T=0	↑	↑
switch	—	0
T=1	↑	↑
	—	—
T=2	↑	↑
	—	—
T=3	↑	↑
switch	—	—
T=4	—	↗
	0	—

Figure 5

H

V

$\geqslant \lambda/2$